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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,940	10/17/2001	Sung-Koog Oh	5000-1-221	6290

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HACKENSACK, NJ 07601

EXAMINER
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HOFFMANN, JOHN M

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 09/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/981,940	<b>Applicant(s)</b> OH ET AL.	
	<b>Examiner</b> John Hoffmann	<b>Art Unit</b> 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 1-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
     If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☒ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
     a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

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## DETAILED ACTION

### *Election/Restrictions*

Applicant's election without traverse of Group II in Paper dated 15 July 2003 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 1-12 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper dated 15 July 2003.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13, line 8 refers to "the direction of the center". There is no antecedent basis for either "The direction" or "the center". This lack of antecedent basis fails to point out and distinctly claim the invention. Specifically: there is no indication what the center is a center of - it could be the fiber, the rotary body, the main body or the entire apparatus. As to the direction: a center is usually a point (although it could be an axis).

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A point does not have a direction. Therefore it is not understood what is meant by a direction of a center.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Paek 4578098.

Looking to figure 2 of Paek, the fiber below the furnace is deemed to be “the main body extended in length”. 30 points to the upper gas feeding section which is over said main body. 36 is the first hollow rotary body: see Abstract, line 13 “By rotating said sleeve”. Feature 40 is the one slit. The bore of the sleeve is the opening which extends in the direction of the center (i.e centerline). As to whether it was “extended” or not, such is a product by process limitation and has little bearing on the actual structure: it is irrelevant as to whether it was created with its original length, or whether it was created with a shorter length that was then extended.

As to the limitation “whereby a gas creates a non-contact polarization to the optical fiber by said first hollow rotary body”: it has been held that the functional “whereby” statement does not define any structure and accordingly can not server to

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distinguish *In re Mason*, 114 USPQ 127, 44 CCPA 937 (1957). This case law is appropriate presently, because it is simply a method of use limitation. One can use the Paek invention to create a non-contact polarization if one wishes. Clearly, one can even use Applicant's apparatus in a manner which does not cause any polarization. It is clear that the optical fiber is "by" the rotary body.

Claim 14 is clearly met.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paek.

As an alternative to the above rejection: it would have been obvious to ship the Paek apparatus by road or rail, or to use it in a building which has a floor. Rails, roads and floors are typically main bodies extended in length. During shipment the Paek feeding section would be "over" the rail or road. During usage it would be "over" the floor. The rest of the limitations are applied as above.

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Claims 13 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over a common threaded nut - typically found in hardware stores.

It would have been obvious to ship nuts from a manufacturing plant to stores: so as to permit people to purchase nuts without having to travel vast distances to the manufacturing plant. Almost (if not all) stores in the USA have floors. Floors usually have a length. The nuts "over" the floor, road, or train rails read on the present broad claims. Nuts are "hollow rotary" bodies because their intended use is to rotate them about bolts, machine screws and the like. The thread of the nut is deemed to be the claimed slit. The thread extends down the length of the nut. A fiber can be fed into a nut - no matter what angle the nut is oriented. However, it noted that the claim does not require a fiber as part of the apparatus and thus does not give much meaning to the claimed structure. The bore/hole of the nut is clearly in the direction of the center(line) of the nut. A centerline is a center of a nut.

As indicated above, the "whereby" limitation does not define any structure and cannot serve to distinguish. However, one could use gas blowers to impart polarization to a fiber that is "by" the rotary body (i.e. nut).

Claim 15 is clearly met - a thread is inclined.

Claim 16 is clearly met - a thread is spirally.

### **Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nagayoshi, Cocchini, Strackenbrock, and Weber are cited as

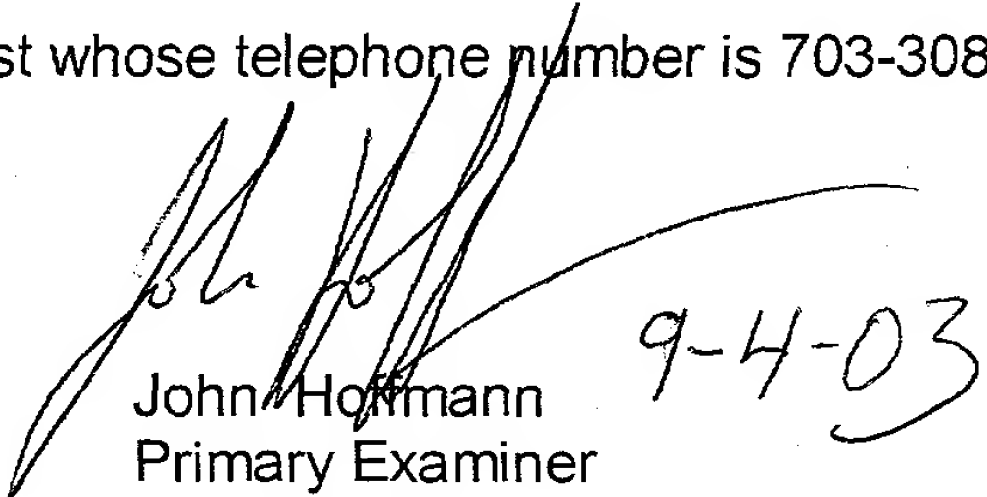
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being relevant to the disclosed invention. Whereas it is general USPTO policy to search and cite all relevant prior art where reasonable, the present claims are too broad too reasonably to do a complete search. There are probably hundreds of thousands of prior art devices which read on the broad claim language: a device which has a slit and an opening and can rotate. Examiner cannot reasonably search for all possible way that Applicant may limit the claims. Thus, if Applicant limits the claims it is very possible that a future Office action will newly cite additional art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is 703-308-0469. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 703-308-1164. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

  
John Hoffmann  
Primary Examiner  
Art Unit 1731

9-4-03

jmh